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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/754,542	01/12/2004	Hajime Kimura	07977-294002	9260
26171	7590	09/07/2005	EXAMINER	
FISH & RICHARDSON P.C. P.O. BOX 1022 MINNEAPOLIS, MN 55440-1022			DONG, DALEI	
			ART UNIT	PAPER NUMBER
			2879	

DATE MAILED: 09/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

Office Action Summary	Application No. 10/754,542	Applicant(s) KIMURA, HAJIME	
	Examiner Dalei Dong	Art Unit 2879	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 June 2004.
 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 6-13 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) ☐ Claim(s) _____ is/are allowed.
 6) ☒ Claim(s) 6-13 is/are rejected.
 7) ☐ Claim(s) _____ is/are objected to.
 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
 10) ☒ The drawing(s) filed on 12 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>1/12/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. 10/061,018, filed on January 29, 2002.

Specification

2. Applicant is reminded of the proper content of an abstract of the disclosure.

A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains. If the patent is of a basic nature, the entire technical disclosure may be new in the art, and the abstract should be directed to the entire disclosure. If the patent is in the nature of an improvement in an old apparatus, process, product, or composition, the abstract should include the technical disclosure of the improvement. In certain patents, particularly those for compounds and compositions, wherein the process for making and/or the use thereof are not obvious, the abstract should set forth a process for making and/or use thereof. If the new technical disclosure involves modifications or alternatives, the abstract should mention by way of example the preferred modification or alternative.

The abstract should not refer to purported merits or speculative applications of the invention and should not compare the invention with the prior art.

Where applicable, the abstract should include the following:

- (1) if a machine or apparatus, its organization and operation;
- (2) if an article, its method of making;
- (3) if a chemical compound, its identity and use;
- (4) if a mixture, its ingredients;
- (5) if a process, the steps.

Extensive mechanical and design details of apparatus should not be given.

3. The disclosure is objected to because of the following informalities:

Applicant should update the status of the Parent Divisional application, on page 1, line 4, "now allowed" should be changed to "now allowed as U.S. Patent No. 6,717,359 to Kimura".

Appropriate correction is required.

4. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

5. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: Method of Manufacturing a Light-Emitting Device Having Transparent Protrusions.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

7. Claim 6 is rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,246,179 to Yamada.

Regarding to claim 6, Yamada discloses in Figures 3 and 4, a method of manufacturing a light emitting device, the method comprising: forming at least a transparent protrusion (17) forming a pixel electrode (61) to overlap the transparent protrusion (17); forming an organic layer (66) to overlap the pixel electrode; and forming a cathode (67) over the organic layer (66).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,217,183 to Shipman in view of U.S. Patent No. 6,246,179 to Yamada.

Regarding to claim 7, Shipman discloses in Figures 1, a personal computer comprising a main body (9), casing, a display portion (5), a keyboard (7), the personal computer including a light-emitting device.

However, Shipman does not disclose the light-emitting device comprises: a transparent protrusion; a pixel electrode over the transparent protrusion; an organic layer over the pixel electrode; and a cathode over the organic layer, wherein a surface of the cathode in contact with the organic layer is uneven.

Yamada teaches in Figure 4, a light-emitting device comprises: a transparent protrusion (17); a pixel electrode (61) over the transparent protrusion (17); an organic layer (66) over the pixel electrode (61); and a cathode (67) over the organic layer (66), wherein a surface of the cathode (67) in contact with the organic layer is uneven for the purpose of preventing short circuits between the cathode and the anode and reducing deterioration of the emission layer.

Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have utilize the light-emitting device of Yamada for the personal computer system of Shipman in order to prevent short circuits between the cathode and the anode and reduce the deterioration of the emission layer.

Regarding to claim 8, Yamada teaches in Figure 4, an insulating film (19 comprised of SiN) in a traverse direction (horizontal direction) of the transparent

protrusion (vertical direction), wherein the insulating film has a high light absorption property, and the motivation to combine is the same as above.

Regarding to claim 9, Yamada teaches in Figure 7, the transparent protrusion (17 have angle of theta 2) is a microlens, and the motivation to combine is the same as above.

10. Claims 10-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,330,461 to Anderson in view of U.S. Patent No. 6,246,179 to Yamada.

Regarding to claim 10, Anderson discloses in Figure 1, a portable telephone comprising a main body, a sound output portion (3), a sound input portion (8), a display portion (4), operation switches (7), and an antenna (9), the portable telephone including a light emitting device.

However, Anderson does not disclose the light-emitting device comprises: a transparent protrusion; a pixel electrode over the transparent protrusion; an organic layer over the pixel electrode; and a cathode over the organic layer, wherein a surface of the cathode in contact with the organic layer is uneven.

Yamada teaches in Figure 4, a light-emitting device comprises: a transparent protrusion (17); a pixel electrode (61) over the transparent protrusion (17); an organic layer (66) over the pixel electrode (61); and a cathode (67) over the organic layer (66), wherein a surface of the cathode (67) in contact with the organic layer is uneven for the purpose of preventing short circuits between the cathode and the anode and reducing deterioration of the emission layer.

Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have utilize the light-emitting device of Yamada for the portable telephone of Anderson in order to prevent short circuits between the cathode and the anode and reduce the deterioration of the emission layer.

Regarding to claim 11, Yamada teaches in Figure 4, an insulating film (19) comprised of SiN) in a traverse direction (horizontal direction) of the transparent protrusion (vertical direction), wherein the insulating film has a high light absorption property, and the motivation to combine is the same as above.

Regarding to claim 12, Yamada teaches in Figure 7, the transparent protrusion (17) have angle of theta 2) is a microlens, and the motivation to combine is the same as above.

Regarding to claim 13, Anderson discloses in Figure 1, an operation panel (5), a connecting portion, and a power source switch (7).

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following prior art are cited to further show the state of the art of composition of a light-emitting device.

Art Unit: 2879

U.S. Patent No. 4,728,581 to Kane.

U.S. Patent No. 5,485,055 to Keyser.

U.S. Patent No. 6,072,278 to Keyser.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dalei Dong whose telephone number is (571)272-2370. The examiner can normally be reached on 8 A.M. to 5 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimeshkumar Patel can be reached on (571)272-2457. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



D.D.

August 30, 2005



Joseph Williams
Primary Examiner
Art Unit 2879